NONAQUEOUS ELECTROLYTE AND SECONDARY BATTERY USING THE SAME

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Abstract of JP2002343426

PROBLEM TO BE SOLVED: To provide a nonaqueous electrolyte which can realize a battery of superior safety, having a high flashing point and a superior service life property with little capacity lowering and deterioration in load characteristics, during high temperature storage as a decomposition reaction of a solvent is suppressed, and to provide a secondary battery containing this nonaqueous electrolyte. SOLUTION: The nonaqueous electrolyte contains the nonaqueous solvent including cyclic carboxylic acid ester, a sulfonic acid derivative, and a lithium salt. By using the electrolyte containing the cyclic carboxylic acid ester, the lithium salt such as LiPF6, and sulfonic acid derivatives, the nonaqueous electrolyte secondary battery can be provided, in which the deterioration in the load characteristics or resistance at a service life test including a high temperature storage test, is significantly suppressed. In addition, the nonaqueous electrolyte enables providing the nonaqueous electrolyte secondary battery of superior safety, having the high flashing point.

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